UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/905,343	07/14/2001	Anjali Chandnani	063170.6288 (20000098)	3770

5073   7590   01/20/2006

BAKER BOTTS L.L.P.
2001 ROSS AVENUE
SUITE 600
DALLAS, TX 75201-2980

EXAMINER
SCHUBERT, KEVIN R

ART UNIT	PAPER NUMBER
2137	

DATE MAILED: 01/20/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
	09/905,343	CHANDNANI ET AL.
Office Action Summary	Examiner	Art Unit	
	Kevin Schubert	2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *14 November 2005*.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)
2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
    Paper No(s)/Mail Date _____ .

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .
5)☐ Notice of Informal Patent Application (PTO-152)
6)☐ Other: _____ .

DETAILED ACTION

Claims 1-23 have been considered.

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR

1.17(e), was filed in this application after final rejection. Since this application is eligible for continued

examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the

finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's

submission filed on 11/14/05 has been entered.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for

the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a
printed publication in this or a foreign country, before the invention thereof by the applicant for a
patent.

Claims 1,4-9,13-16, and 19-23 are rejected under 35 U.S.C. 102(a) as being anticipated by

Fermoyle, (Fermoyle, Ken. Firm Offers Free Tool to Fight 'Love You' Virus. June 2000. Ottawa PC

User's Group).

As per claims 1 and 13-16, the applicant describes a method of detecting a script language virus

comprising the following limitations which are met by Fermoyle:

a) preparing language description data corresponding to at least one script language (paragraph

8);

b) preparing detection data for viral code corresponding to the script language virus (paragraph

8);

c) lexically analyzing a data stream using the language description data and the detection data to detect the viral code (paragraph 8);

As per claims 4-6 and 19-21, the applicant limits the method of claims 1 and 16, which are met by Fermoyle (see above), with the following limitation which is also met by Fermoyle:

Wherein the language description data correspond to language definition rules and language check rules (paragraph 8).

As per claim 7, the applicant limits the method of claim 1, which is met by Fermoyle (see above), with the following limitation which is also met by Fermoyle:

Further comprising setting language definition rules for each of the at least one script language (paragraph 8);

The MailMarshal uses language definition rules to search for particular keywords within the viruses.

As per claims 8,9, and 22, the applicant limits claims 1 and 16, which are met by Fermoyle (see above), with the following limitation which is also met by Fermoyle:

Wherein the detection data comprise at least one test, wherein each of the at least one test correspond to a pattern match or a cyclical redundancy check (paragraph 8).

As per claims 10-11, the applicant describes the method of claim 1, which is met by Fermoyle, with the following limitation which is also met by Fermoyle:

Wherein the data stream is converted to a stream of tokens using lexical analysis (paragraph 8).

As per claim 23, the applicant limits the apparatus of claim 16, which is met by Fermoyle (see above), with the following limitation which is also met by Fermoyle:

Wherein detection engine converts the data stream to a stream of tokens using lexical analysis,

and the tokens correspond to respective language constructs (paragraph 8).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness

rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as
> set forth in section 102 of this title, if the differences between the subject matter sought to be
> patented and the prior art are such that the subject matter as a whole would have been obvious
> at the time the invention was made to a person having ordinary skill in the art to which said
> subject matter pertains. Patentability shall not be negatived by the manner in which the invention
> was made.

Claims 2-3 and 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fermoyle

in view of Session (Session 19: Intro to Compiler Design: BNF, Recursion and Finite Automata. Fall

1999. Computer Science Cource CS373. Retrieved from

www.whitworth.edu/academic/Department/MathComputerScience/Courses/CS373_1999_Fall/Session_1

9.doc).

As per claim 2-3 and 17-18, the applicant limits the method of claims 1 and 16, which are met by

Fermoyle (see above), with the following limitation which is met by Session:

Wherein the language description data correspond to Dynamic Finite Automata (Session: pages

3-4);

Fermoyle discloses all the limitations of claims 1 and 16. However, Fermoyle does not explicitly

address that the language description data are dynamic finite automata. Session discloses the well-

known idea in the art that lexical analysis may rely on dynamic finite automata in order to recognize

tokens in a language. Furthermore, the dynamic finite automata may be used to construct string

matchers. Combining the ideas of Session with those of Fermoyle allows the lexical analysis process to

utilize dynamic finite automata.

It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of Session with those of Fermoyle because utilizing dynamic finite automata as suggested by Session in the lexical analysis process of Fermoyle would assist in the detection of viral code by providing an efficient means for recognizing tokens and constructing string matches.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fermoyle in view of the applicant's admitted prior art.

As per claim 12, the applicant describes the method of claim 10, which is met by Fermoyle (see above), with the following limitation which is met by the applicant's admitted prior art:

Wherein a cyclical redundancy check is performed on the stream of tokens to detect viral code (Specification: pages 3-4);

As discussed by the applicant, one type of anti-virus technique is a cyclical redundancy check. As part of the cyclical redundancy check (CRC), unique CRC signature for each and every file to be protected is generates and stored. At a later time, a CRC error checking program determines whether a file has been tampered with or otherwise has become corrupted since the CRC signature was generated and stored, by generating a second CRC signature and then comparing the stored CRC signature with the second CRC signature. It would have been obvious to one of ordinary skill in the art at the time the invention was filed to combine the ideas of the applicant's admitted prior art with those of Fermoyle and use a cyclical redundancy check on the stream of tokens because doing so increases security in the system by providing a means to determine whether a file has been tampered with or otherwise has become corrupted since the CRC signature was generated and stored.

Response to Arguments

Applicant's arguments filed 11/14/05 with respect to the rejection of claims 10-11 under 112 4th paragraph have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments with respect to the rejection of claims 1 and 13-16 under 102(a) fail to

comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a

patentable invention without specifically pointing out how the language of the claims patentably

distinguishes them from the references. Examiner respectfully submits that applicant merely expresses

his disagreement with the rejection and recants the limitations of the claim. Such an argument does not

comply 37 CFR 1.111(b).

Conclusion

This action is made non-final.

Any inquiry concerning this communication or earlier communications from the examiner should

be directed to Kevin Schubert whose telephone number is (571) 272-4239. The examiner can normally

be reached on M-F 7:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor,

Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where

this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application

Information Retrieval (PAIR) system. Status information for published applications may be obtained from

either Private PAIR or Public PAIR. Status information for unpublished applications is available through

Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC)

at 866-217-9197 (toll-free).

KS

EMMANUEL L. MOISE
SUPERVISORY PATENT EXAMINER